## CATCH

## **Cybersecurity Applications and Technology for Homeland Security**

## Day 1: March 3, 2009

**BALLROOM B** 

09:00 WELCOME

Douglas Maughan, Ph.D.

Program Manager, Cyber Security R&D Science and Technology Directorate, DHS

09:10 DHS S&T WELCOME

David Boyd, Ph.D.

Director, Command, Control and Interoperability Division (CID) Science and Technology Directorate, DHS

09:30 KEYNOTE ADDRESS

The Honorable James R. Langevin U.S. House of Representatives (RI)

10:00 BREAK

10:30 SESSION 1 – BOTNETS AND MALWARE

Effective Flow Filtering for Botnet Search Space Reduction

Robert Walsh, BBN Technologies

**Real-Time Detection of Fast Flux Service Networks** 

Alper Caglayan, Milcord LLC

A Combined Fusion and Data Mining Framework for the Detection of Botnets

Owen McCusker, Sonalysts, Inc.

12:00 LUNCH (ON YOUR OWN)

13:30 SESSION 2 – INTERNET ROUTING AND SECURITY

**Progress Toward Securing the Routing Infrastructure** Sandra Murphy, SPARTA, Inc.

BGPmon: A real-time, scalable, extensible monitoring system

Dan Massey, Colorado State University

A Comparative Analysis of BGP Anomaly Detection and Robustness Algorithms

Kotikapaludi Sriram, NIST

15:00-19:00 EXPO (BALLROOM A)

Day 2: March 4, 2009

**BALLROOM B** 

08:30 WELCOME

Douglas Maughan, Ph.D.

Program Manager, Cyber Security R&D Science and Technology Directorate, DHS

**08:45 KEYNOTE ADDRESS** 

Pascal Levensohn

Founder & Managing Partner Levensohn Venture Partners

09:30 BREAK

10:00 SESSION 3 – CYBERSECURITY RESEARCH

**INFRASTRUCTURE** 

**Current Developments in DETER Cybersecurity Testbed** 

Technology

Terry Benzel, USC ISI

**Uses and Challenges for Network Datasets** 

John Heidemann, USC ISI

**How to Test DoS Defenses** 

Roshan K. Thomas, SPARTA, Inc.

11:30 LUNCH (ON YOUR OWN)

13:00 **PANEL** 

Rod Beckstrom, DHS National Cyber Security Center

John Large, U.S. Secret Service

John Nagengast, AT&T

Roger Novak, Novak Biddle Venture Partners

Shankar Sastry, University of California, Berkeley

14:30 BREAK

15:00 SESSION 4 – DOMAIN NAME SYSTEM SECURITY

(DNSSEC) AND DATA VISUALIZATION

**DNSSEC in Practice: Using DNSSEC-Tools to Deploy DNSSEC** 

Russ Mundy, SPARTA Inc.

Deploying DNS Security (DNSSEC) in Large-Scale Operational

**Environments** 

Joe Gersch, Secure64 Software Corporation

FloVis: Flow Visualization System

Carrie Gates, CA Labs

16:30 CONCLUSION